## REPLY TO THE EDITORIAL

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In reply to the recent Editorial written by Mike Wilson, regarding the reporting of new species to Britain, I would like to highlight the following five points:

- 1. The importance of clarifying the status of "new species" in Britain.
- 2. The repercussions of calling an insect "British".
- 3. The constraints within which the Central Science Laboratory (CSL) operates.
- 4. Information on outbreaks and interceptions of alien species recorded by the Plant Health and Seeds Inspectorate (PHSI) in England and Wales is available on the Internet.
- 5. Finally, how CSL and the Department for Environment, Food and Rural Affairs (DEFRA) can improve co-operation and share intelligence more effectively with other entomologists.

As already mentioned in the Editorial, it is absolutely vital that the status of the organism in the UK is made clear in any publication (including checklists). For example, whether the "new species" record is simply based on a detection (e.g. interception on imported produce, a vagrant or migrant caught in a light trap) or on a naturalised population (e.g. a breeding population likely to persist for the foreseeable future).

Making the status clear is important as records of new plant pest species can have legal and financial implications. British checklists of insects contain numerous species, including many economically important plant pests, which are not currently established anywhere in the UK. These are often based on old records, single interceptions on imported plant material or brief transient populations. This information is easily and frequently misinterpreted by overseas phytosanitary services and can have a direct impact on the UK agricultural and horticultural industries, by the imposition of prohibitions or additional measures/costs for our exports. One example is the Mediterranean fruit fly, Ceratitis capitata (Wiedemann). This is a major fruit and vegetable pest and is listed in the phytosanitary legislation of many countries. It is not currently known to occur anywhere in the UK although the PHSI have detected it on imported plant material in England and Wales on many occasions. Unfortunately for potential UK exporters, Massee (1940) reported an apple tree being attacked by C. capitata in Middlesex in 1939. Smith et al. (1997) suggest that the UK may have records of short-lived adventive populations as well as interception records and it is listed as an "imported species" in the Royal Entomological Society Checklist (Chandler, 1998). Such listings have resulted in Japan, Taiwan, the Republic of Korea and the Republic of China prohibiting the import of an extensive list of fruit and vegetables (hosts of C. capitata) from the UK, on the grounds that they may harbour the pest.

The wording used in the fourth paragraph "In turn PHSI should assist... publishing... any species that they have found in the UK" is contentious and implies that all interceptions should be published as "new British Records". The majority of the species intercepted by the PHSI are transient finds, vagrants, or short-lived populations, which are incapable of surviving outdoors in the UK and will probably die after a short period. The *Checklists of Insects of the British Isles* contain

numerous examples of non-indigenous insects following publication of a single incidental finding. For example, 45 of the 57 Diaspididae listed by Boratynski & Williams (1964) are non-indigenous and most do not currently occur in the UK.

Accepting something as "British" should imply something about its biology, for example, that it is capable of surviving and breeding under British climatic conditions (with allowances for repeated seasonal migrants, etc.). This in turn allows biological predictions and risk assessments to be made. Many interceptions are made on plants that are not true hosts or on plant material whose country of origin differs from the insect, for example, thrips can easily move between plants at flower auctions and wholesalers. Some workers question the value of publishing interceptions on imported plant material as "British" records.

The CSL also encounters other difficulties and delays regarding publishing records, unlikely to be met by the wider entomological community. An appropriate policy (e.g. containment, eradication, monitoring), based on a survey and risk management, has to be decided for each new pest encountered and this can take time. Policy implications have to be considered. In addition, the majority of samples collected by the PHSI are from commercial premises and we cannot publish precise locality details due to customer confidentiality.

There are also restrictions due to limited resources and lack of interest shown in publishing such lists by most journals. The Invertebrate Identification Team of CSL provides the PHSI with up to five thousand identifications each year, consisting of approximately 500 invertebrate taxa. Checking and publishing these data takes up a large amount of time, but efforts are being made to put data on the Internet. Some information on the detection of alien species in England and Wales by the PHSI is already available on the Internet, although this is aimed at the plant industry and phytosanitary services. Significant finds, incursions and outbreaks of new plant pests in Britain are reported on the DEFRA Plant Health Service website (http://www.defra.gov.uk/planth/what.htm). The European and Mediterranean Plant Protection Organisation (EPPO) publish monthly reports of interceptions of regulated alien pests notified to the European Commission (http://www.eppo.org/PUBLICATIONS/EPPO\_RS/reporting\_service.html), (EC) and highlight new plant pest introductions in the EPPO region (http:// www.eppo.org/QUARANTINE/Alert List/alert list.html). The CSL is currently considering publishing a more comprehensive summary of interceptions on the Internet.

We fully appreciate that amateur and other professional entomologists are exceptionally important to the work of CSL and PHSI, and we must do all that we can to encourage, stimulate and work with them to ensure that we know as soon as possible when potential alien pests are found. We trust that other entomologists appreciate the importance of informing the PHSI as soon as possible, if they find a non-indigenous plant pest or potential plant pest.

I would like to express my sincere thanks to the *Journal*, on behalf of DEFRA Plant Health Service, for permitting us to provide a timely and reasoned response to the Editorial. It has raised a series of important issues and further dialogue would be welcomed, either personally or via the *Journal*. Alternatively, it might be useful to convene a one-day seminar with interested parties to discuss in an open way ideas of disseminating new records, and to decide on how best to accommodate our mutual interests. Any feedback from you would be welcome.

Finally, I would like to end on a positive note with an example of how things work well. An Asian psyllid, *Cacopsylla fulguralis* (Kuwayana), was first identified in Britain by the CSL and the Natural History Museum in April this year. Within a

month the EC was notified and interviews given on radio and TV. In June a Plant Pest Notice (Malumphy *et al.*, 2002) was issued, a scientific note submitted for publication in July (Malumphy & Halstead, 2002) and a popular magazine article published in August (Gianfrancesco, 2002).

## REFERENCES

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## **BOOK REVIEW**

**Dragonflies of Kent**. J. & G. Brook, 2001. Transactions of the Kent Field Club Volume 16. 114 pp. 16 colour plates, 51 line drawings. £7.00. ISBN 0-950-1696-9-2.

In recent years the Kent Field Club, the Natural History Society of Kent has published books on the butterflies, amphibians and reptiles of Kent. The latest in the series, "Dragonflies of Kent" is a millennial publication. The decade-long survey confirmed that eleven damselfly and 21 dragonfly species occur in Kent. Amazingly, a new migrant dragonfly species, the Small Red-eyed Damselfly *Erythronuma viridulum* (Charpentier), was recorded shortly after the book went to press and has since been found breeding in the county in the landscaped lakes at Bluewater Shopping Centre. The earliest dragonfly record for the county dates from the Cretaceous Period, a mere 135 million years ago!

Each species of damselfly and dragonfly is illustrated with a line drawing of the species *in situ*, painstakingly drawn by Gill Brook. For each species there is a map of its present distribution in Kent and an account of its life history. Symbols on the maps differentiate between confirmed breeding, when exuviae of the last instar nymphs were found, probable breeding when mating and egg-laying were observed, and sightings of adults only. There are 16 colour plates of the more dramatic species and a gazetteer giving details of the best places in Kent to watch dragonflies. The book is an easily readable summary of the status and distribution of Odonata in Kent. Sales have exceeded expectations and a reprinting is under consideration.

JOHN BADMIN